AF09ZB-40-00-23

AF09ZB-40-00-23 100-250V50/60HZ-DC Contactor

General Information

Extended Product Type	AF09ZB-40-00-23
Product ID	1SBL136261R2300
EAN	3471523124431
Catalog Description	AF09ZB-40-00-23 100-250V50/60HZ-DC Contactor
Long Description	AF09ZB 4-pole contactors comply with the latest railway rolling stock standards and allow installation in passengers or driver cabins for trains frequently operating tunnels or undergrounds. They are mainly used for controlling non-inductive or slightly inductive loads and generally for controlling power circuits up to 690 V AC and 440 V DC. Improve the compactness of the installations thanks to reduced dimension and side-by -side mounting requiring less 15% width (without spacing) from -40 °C up to +70 °C. Meet all main rollling stocks standards: IEC 60947-4-1, IEC 60947-5-1, IEC 60077-1/-2 and applicable parts of EN 50155 standards, shocks and vibration withstand conforming to IEC 61373 cat. 1, class B. Reach the highest levels in fire and smoke behaviour with compliance to European standard EN 45545-2 (HL2, HL3 hazard levels) in group mounting. Reduce train energy with lighter devices and requiring 68% less coil energy consumption in operation. Electronic coil interface handling large DC voltage fluctuation voltage, including several Uc DC control voltages used for battery supply and accepting sinusoïdal AC 50/60 Hz control supplies included inside Ucmin.... Ucmax voltage range. Max permitted AC 50/60 Hz control voltage must not be exceeded (see technical data). Wide range of auxiliary contact blocks for front and side mounting.

Ordering

Minimum Order Quantity	1 piece
Customs Tariff Number	85364900

Popular Downloads

Data Sheet, Technical Information	1SBC100174C0201
Instructions and Manuals	1SBC101037M6801

Dimensions

Product Net Width	45 mm
Product Net Depth / Length	77 mm
Product Net Height	86 mm
Product Net Weight	0.31 kg

Technical

Number of Main Contacts NO	4
Number of Main Contacts NC	0

Number of Auxiliary Contacts NO	0
Number of Auxiliary Contacts NC	0
Rated Operational Voltage	Main Circuit 690 V
Rated Frequency (f)	Main Circuit 50 / 60 Hz
Conventional Free-air Thermal Current (I_{th})	acc. to IEC 60947-4-1, Open Contactors q = 40 °C 35 A
Rated Operational Current AC-1 (I_e)	(690 V) 40 °C 25 A (690 V) 60 °C 25 A (690 V) 70 °C 22 A
Rated Operational Current AC-3 (I_e)	(220 / 230 / 240 V) 60 °C 9 A (380 / 400 V) 60 °C 9 A (415 V) 60 °C 9 A (440 V) 60 °C 9 A (500 V) 60 °C 9.5 A (690 V) 60 °C 7 A
Rated Operational Power AC-3 (P_e)	(220 / 230 / 240 V) 2.2 kW (380 / 400 V) 4 kW (400 V) 4 kW (415 V) 4 kW (440 V) 4 kW (500 V) 5.5 kW (690 V) 5.5 kW
Rated Short-time Withstand Current (I_{cw})	at 40 °C Ambient Temp, in Free Air, from a Cold State 10 s 150 A at 40 °C Ambient Temp, in Free Air, from a Cold State 15 min 35 A at 40 °C Ambient Temp, in Free Air, from a Cold State 1 min 60 A at 40 °C Ambient Temp, in Free Air, from a Cold State 1 s 300 A at 40 °C Ambient Temp, in Free Air, from a Cold State 30 s 80 A for 1 s -empty- A
Maximum Breaking Capacity	cos phi=0.45 (cos phi=0.35 for Ie > 100 A) at 440 V 250 A cos phi=0.45 (cos phi=0.35 for Ie > 100 A) at 690 V 106 A
Maximum Electrical Switching Frequency	AC-1 600 cycles per hour
Rated Insulation Voltage (U_i)	acc. to IEC 60947-4-1 and VDE 0110 (Gr. C) 690 V
Rated Impulse Withstand Voltage (U_{imp})	6 kV
Maximum Mechanical Switching Frequency	3600 cycles per hour
Rated Control Circuit Voltage (U_c)	50 Hz 100 ... 250 V 60 Hz 100 ... 250 V DC Operation 100 ... 250 V
Operate Time	Between Coil De-energization and NC Contact Closing 13 ... 98 ms Between Coil De-energization and NO Contact Opening 11 ... 95 ms Between Coil Energization and NC Contact Opening 38 ... 90 ms Between Coil Energization and NO Contact Closing 40 ... 95 ms
Connecting Capacity Main Circuit	Flexible with Insulated Ferrule 1x 0.75 ... 4 mm² Flexible with Insulated Ferrule 2x 0.75 ... 2.5 mm² Flexible with Ferrule 1/2x 0.75 ... 6 mm² Rigid 1/2x 1 ... 6 mm²
Connecting Capacity Control Circuit	Flexible with Ferrule 1/2x 0.75 ... 2.5 mm² Flexible with Insulated Ferrule 1x 0.75 ... 2.5 mm² Flexible with Insulated Ferrule 2x 0.75 ... 1.5 mm² Rigid 1/2x 1 ... 2.5 mm²
Wire Stripping Length	Control Circuit 10 mm Main Circuit 10 mm
Degree of Protection	acc. to IEC 60529, IEC 60947-1, EN 60529 Coil Terminals IP20 acc. to IEC 60529, IEC 60947-1, EN 60529 Main Terminals IP20
Terminal Type	Screw Terminals

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Environmental

Ambient Air Temperature	Close to Contactor for Storage -60 ... +80 °C Near Contactor for Operation in Free Air -40 ... +70 °C
Climatic Withstand	Category B according to IEC 60947-1 Annex Q
Maximum Operating Altitude Permissible	3000 m

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Technical UL/CSA

General Use Rating UL/CSA	(600 V AC) 25 A

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Certificates and Declarations (Document Number)

CB Certificate	CB_SE-80869M1
CCC Certificate	CCC_2010010304445624
Declaration of Conformity - CE	1SBD250002U1000
EAC Certificate	EAC_RU C-FR ME77 B01010
Environmental Information	1SBD250167E1000
GOST Certificate	GOST_POCCFR.ME77.B07175.pdf
Instructions and Manuals	1SBC101037M6801
KC Certificate	KC_HW02016-15007A
RoHS Information	1SBD251017E1000
UL Certificate	UL_20120918-E319322-3-1
UL Listing Card	UL_E319322

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Container Information

Package Level 1 Units	1 piece
Package Level 1 Width	87 mm
Package Level 1 Depth / Length	79 mm
Package Level 1 Height	47 mm
Package Level 1 Gross Weight	0.31 kg
Package Level 1 EAN	3471523124431
Package Level 2 Units	54 piece
Package Level 2 Width	250 mm
Package Level 2 Depth / Length	300 mm
Package Level 2 Height	315 mm
Package Level 2 Gross Weight	16.74 kg
Package Level 3 Units	1296 piece

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Classifications

Object Classification Code	Q
ETIM 4	EC000066 - Magnet contactor, AC-switching
ETIM 5	EC000066 - Magnet contactor, AC-switching
ETIM 6	EC000066 - Power contactor, AC switching
ETIM 7	EC000066 - Power contactor, AC switching
UNSPSC	39121529

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Categories

Low Voltage Products and Systems → Control Products → Contactors → Block Contactors